



U.S. NUCLEAR REGULATORY COMMISSION

STANDARD REVIEW PLAN

OFFICE OF NUCLEAR REACTOR REGULATION

15.6.2 RADIOLOGICAL CONSEQUENCES OF THE FAILURE OF SMALL LINES CARRYING PRIMARY COOLANT OUTSIDE CONTAINMENT

REVIEW RESPONSIBILITIES

Primary - ~~Accident Evaluation Branch (AEB)~~ Emergency Preparedness and Radiation Protection Branch (PERB)¹

Secondary - None

I. AREAS OF REVIEW

This Standard Review Plan (SRP)² section covers the radiological consequences of failures outside the containment of small lines connected to the primary coolant pressure boundary, such as instrument lines and sample lines. The PERB³ review includes the following:

1. The identification of small lines postulated to fail and the isolation provisions for these lines, including the applicability of General Design Criterion 55 (GDC 55)⁴ ~~(Ref. 1)~~,⁵ which requires isolation capability of the line inside and outside containment, unless it can be demonstrated that the containment isolation provisions for a specific class of lines, such as instrument lines, are acceptable on some other defined basis. ~~and~~⁶ Regulatory Guide 1.11 ~~(Ref. 2)~~,⁷ which ~~requires~~ defines isolation capability outside containment and other requirements for those lines that are exempt from GDC 55 instrument line penetrations.⁸ The implementation of these regulatory positions and guidelines is reviewed by the ~~Containment Systems Branch (CSB)~~ Containment Systems and Severe Accident Branch (SCSB)⁹ under SRP Section 6.2.4.
2. The failure scenario, as described by the applicant, to assure¹⁰ that the most severe radioactive releases have been considered.

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USNRC STANDARD REVIEW PLAN

Standard review plans are prepared for the guidance of the Office of Nuclear Reactor Regulation staff responsible for the review of applications to construct and operate nuclear power plants. These documents are made available to the public as part of the Commission's policy to inform the nuclear industry and the general public of regulatory procedures and policies. Standard review plans are not substitutes for regulatory guides or the Commission's regulations and compliance with them is not required. The standard review plan sections are keyed to the Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants. Not all sections of the Standard Format have a corresponding review plan.

Published standard review plans will be revised periodically, as appropriate, to accommodate comments and to reflect new information and experience.

Comments and suggestions for improvement will be considered and should be sent to the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Washington, D.C. 20555.

3. The models and assumptions used by the applicant for the calculation of the thyroid and whole-body doses for the postulated failure.
4. An evaluation of the primary coolant iodine activity, including the effects of a concurrent iodine spike, and the technical specifications for the reactor coolant iodine activity.
5. An independent calculation by the staff of the thyroid and whole-body doses for the small line failure, including an evaluation of the isolation times and maximum leak rates of the isolation valves.
6. A comparison of the doses calculated by the applicant and by the staff with appropriate exposure guidelines of 10 CFR ~~Part 100,~~¹¹ 100.11 ~~(Ref. 3)~~¹² and Regulatory Guide 1.11,¹³ as stated in subsection II below.

Review Interfaces¹⁴

In addition, ~~AEB~~¹⁵PERB will coordinate its review with other branches that interface in the overall review of the break analysis, as follows:¹⁶

1. The Reactor Systems Branch (~~RSBSRXB~~¹⁷) ~~upon request by the AEB~~¹⁸ will confirm the value used by the applicant for the mass of coolant released in the accident and to determine if this accident will cause fuel failures as part of its review responsibility for SRP Section 6.2.1.3.¹⁹
2. The ~~Containment Systems Branch (CSB)~~²⁰ Containment Systems and Severe Accident Branch (SCSB) ~~upon request by the AEB,~~²¹ will verify that secondary containment integrity and leaktightness are maintained during the course of the accident as part of its review responsibility for SRP Section 6.2.3.²²
3. The SCSB will review the isolation capability outside containment for instrument or other small lines as part of its review responsibility for SRP Section 6.2.4.²³
4. The SPLB will review the function of atmospheric cleanup systems in the secondary containment as part of its review responsibility for SRP Section 6.5.1.²⁴
5. The requirements for technical specifications on reactor coolant radioactivity will be coordinated with the Technical Specifications Branch (TSB) as part of its primary review responsibility for SRP Section 16.0.²⁵

II. ACCEPTANCE CRITERIA

The acceptance criteria for this SRP section are based on the relevant requirements of the following regulations:

1. ~~General Design Criterion 55~~ GDC 55,²⁶ (Ref. 1)²⁷ as it relates to the identification isolation requirements of small-diameter lines connected to the primary system ~~that are exempted from the isolation requirements of GDC 55 and~~²⁸ that are acceptable on the basis of meeting item (2) below.
2. 10 CFR ~~Part 100,~~²⁹ 100.11 (Ref. 3)³⁰ and Regulatory Guide 1.11,³¹ as it they relates³² to the radiological consequences of a small line break carrying primary coolant outside containment.

The plant site and the dose mitigating engineered safety feature (ESF) systems are acceptable with respect to the radiological consequences of a postulated failure outside the containment of a small line carrying reactor coolant if the calculated whole-body and thyroid doses at the exclusion area and the low population zone outer boundaries ~~do not exceed a small fraction of~~ are substantially below³³ the exposure guideline values of 10 CFR ~~Part 100, §~~³⁴ 100.11 (Ref. 3)³⁵ as stated in position C.1.b of Regulatory Guide 1.11 (Ref. 2).³⁶ A "small fraction" of "Substantially below" the exposure guideline values of³⁷ 10 CFR ~~Part 100.11~~³⁸ means 10% of these exposure guideline values, that is, 25 mSv and 300 mSv (2.5 rem and 30 rem)³⁹ for the whole-body and thyroid doses, respectively.

A plant-specific technical specification is required for the iodine activity in the primary coolant system. The specification is acceptable with respect to the postulated failure if the calculated doses resulting from the failure are within the above exposure guidelines.

Technical Rationale⁴⁰

The technical rationale for application of these above acceptance criteria is discussed in the following paragraphs:⁴¹

1. Compliance with GDC 55 requires that each line that is part of the reactor coolant pressure boundary penetrating the primary reactor containment shall meet specified criteria relative to the use and positioning of isolation valves.

The requirements of this criterion are imposed to ensure that there is no direct communication between the primary coolant and the plant environs. This is provided by specifying requirements for isolation valves — either locked-closed, automatic, or combinations of locked-closed and automatic — on both sides of the containment barrier. Isolation valves outside the containment are to be located as close as practical to the containment. Upon loss of actuating power, automatic valves are to take the position that provides greater safety. Other requirements such as higher quality in design, additional inservice inspection, and protection against severe natural phenomena may also be imposed, depending on the use and physical characteristics of the plant site environs. GDC 55 also includes a provision that the isolation capability of a specific class of lines

(e.g., instrument lines) is acceptable on other defined bases. The isolation capability requirements and radiological dose criteria for instrument line failure are outlined in Regulatory Guide 1.11. Other small-diameter lines will be required to have two isolation valves in series and to meet the same dose criteria as instrument lines.

Meeting the requirements of GDC 55 will provide assurance that instrument lines and other small-diameter lines penetrating the containment and connected to the primary system will not be a source of excessive offsite radiation doses should the line rupture.⁴²

2. 10 CFR 100.11 specifies the manner in which the exclusion area, low population zone, and population center distance shall be determined given (a) a fission product release the plant and (b) meteorological conditions that are pertinent to the site.

An integral part of the siting criteria for new nuclear power plants is the identification of an exclusion area, low population zone, and population center distance. Associated with the exclusion area and the low population zone are radiation dose guidelines, a total radiation dose to the whole body in excess of 250 mSv (25 rem), or a total radiation dose in excess of 3000 mSv (300 rem) to the thyroid from iodine exposure. Demonstration that the proposed nuclear plant design meets these radiation dose guidelines at the exclusion area and low population zone boundaries is achieved by calculating the expected offsite radiation doses using a radioactive source term and the site atmospheric dispersion characteristics. For instrument lines and other small-diameter lines that penetrate the primary containment, the dose criterion is substantially below (i.e., 10%) the guideline doses of 10 CFR 100.11. In addition, Regulatory Guide 1.11, Regulatory Position C.1.b, specifies that instrument lines shall be sized or have an orifice to ensure the following in the event of a failure of the line outside of the primary containment: (a) that the leakage is reduced to the maximum extent consistent with other safety requirements, (b) that the rate and extent of coolant loss are within the capability of the reactor makeup system, and (c) that the integrity and functional performance of secondary containment are maintained. The staff also applies these criteria to other small-diameter lines.

Meeting the criteria for doses resulting from failed instrument or other small-diameter lines provides assurance that offsite radiation doses from postulated accidents will be substantially below (10%) the guideline doses specified in 10 CFR 100.11.⁴³

III. REVIEW PROCEDURES

The reviewer selects and emphasizes specific aspects of this SRP section as are appropriate for a particular plant. The areas to be given attention and emphasis are determined by the similarity of the information provided in the applicant's Safety Analysis Report (SAR) to that recently reviewed on other plants and based on the reviewer's determination of⁴⁴ whether items of special safety significance are involved. The review consists of the following steps:

1. Review of the applicant's description of the small line failures to determine the appropriateness and conservatism of the assumptions used in the analysis.

2. Identification of the small lines connected to the primary reactor coolant system and penetrating the containment. The isolation provisions are identified with respect to the applicability of GDC 55 (i.e., isolation capability inside and outside containment) and for instrument lines,⁴⁵ Regulatory Guide 1.11 (i.e., isolation capability outside containment for lines exempt from GDC 55⁴⁶). The implementation of these guidelines is reviewed by the ~~Containment Systems Branch~~SCSB⁴⁷ under SRP Section 6.2.4. The ~~AEB~~PERB⁴⁸ reviewer will coordinate ~~his~~ the⁴⁹ review with ~~CSB~~SCSB⁵⁰ if additional clarification is needed.

3. Performance of an independent analysis by the staff. The reviewer selects for a failure analysis those small lines that most likely will result in the highest offsite radiological consequences. The selection is ~~largely based on the analysis performed on recently reviewed plants but~~ technical judgement of the reviewer, and⁵¹ should include, if appropriate, the letdown line of the chemical volume and control system (CVCS) and the largest instrument and sample line. The following conservative assumptions are made for the analysis:
 - a. For small lines that meet GDC 55, such as the CVCS letdown line, the failure is assumed to occur downstream of the outboard containment isolation valve in conjunction with a single failure of one of the two containment isolation valves. The amount of primary coolant released outside the containment is determined by considering the method, capability and time required to detect such failure and the time required to isolate the failure (i.e., time to close the operable isolation valve). The PERB reviewer will coordinate the review with SCSB.⁵²

 - b. ~~For small lines exempt from GDC 55, such as instrument lines, but~~⁵³ which meet the isolation guidelines of Regulatory Guide 1.11 (i.e., containment isolation valve outside containment), the failure is postulated to occur downstream of the valve in conjunction with a single failure (i.e., valve does not close). Unless other isolation or flow reduction capabilities are provided (e.g., orifice in line) which will be evaluated on a case-by-case basis, it is assumed that this line failure cannot be isolated and the primary coolant release will continue until the primary system is depressurized.

 - c. The amount of primary coolant released is conservatively estimated by assuming critical flow at the small line break location with the reactor coolant fluid enthalpy corresponding to normal reactor operating conditions. The reviewer evaluates the reactor coolant release rates provided by the applicant, ~~taking into consideration similar information for plants recently reviewed. The reviewer and~~⁵⁴ should verify the release rates and the total amount of coolant released with the ~~RSB~~SRXB⁵⁵ in a coordinating review effort.

 - d. The initial fission product concentrations in the primary coolant are assumed to be the maximum equilibrium values permitted by the standard technical specification for the nuclear steam supply system (NSSS)⁵⁶ vendor or those provided by the applicant. In addition, ~~it is assumed that an iodine spike is assumed to occur~~ occurs⁵⁷ as a result of the reactor shutdown or depressurization

of the primary system. The spike is modeled by increasing the equilibrium fission product activity release rate from the fuel by a factor of 500.

The reviewer consults with the ~~RSBSRXB~~⁵⁸ regarding the potential for and extent of damage to the fuel as a result of the line failure. If appropriate, the additional fission product activity in the primary coolant ~~activity~~⁵⁹ will be included in the analysis.

The fraction of the iodine assumed to become airborne and available for release to the atmosphere, without credit for plateout, is equal to the fraction of the coolant flashing into steam in the depressurization process. The flash fraction is determined by assuming the discharge to be a constant enthalpy process.

- e. For a plant with a dual containment system, it is assumed that the small line failure occurs outside the secondary containment if the line penetrates or bypasses the secondary containment. The release is assumed to occur within the secondary containment if the line terminates inside the secondary containment. The reviewer verifies, in a coordinating review effort with the ~~CSBSCSB~~⁶⁰ the integrity and leaktightness of the secondary containment during the pressure transient associated with the postulated small line failure within its boundaries. An approximate mixing volume is determined from the location of the assumed failure location and the proximity to the secondary containment ventilation system assumed to be operating (if any).

The release of the airborne radioactivity from the secondary containment to the outside atmosphere is evaluated in accordance with the assumption of SRP Section 15.6.5, Appendix A, subsection III.3.

- f. The operation and effectiveness of an ESF-grade filtration system for removal of airborne radioiodine will be reviewed ~~on a case-by-case basis~~⁶¹ in coordination with the SPLB review of SRP Section 6.5.1.⁶² The reviewer verifies that all potential locations for a small line break are within ventilation zone of the system.

Depending on the type of air treatment system credited in the analysis, a ground-level or elevated (stack) release is assumed. The appropriate atmospheric dispersion factors (χ/Q values) are provided by the assigned meteorologist in accordance with SRP Section 2.3.4.

- 4. Review of dose calculations. The whole-body and thyroid doses calculated by the staff and by the applicant are compared with the acceptance criteria stated in subsection II of this SRP section. If the doses calculated by the staff are not within the exposure guidelines (i.e., they are not less than 10% of 10 CFR ~~Part 100, §~~⁶³ 100.11), then the staff will pursue alternatives with the applicant to reduce the doses to within the guideline values. For standard design certification reviews, the calculation of hypothetical offsite radiological consequences is performed using proposed technical specification limits on coolant radioactivity and atmospheric diffusion parameters specified in the site parameter envelope.⁶⁴

For standard design certification reviews under 10 CFR Part 52, the procedures above should be followed, as modified by the procedures in SRP Section 14.3 (proposed), to verify that the design set forth in the standard safety analysis report, including inspections, tests, analysis, and acceptance criteria (ITAAC), site interface requirements and combined license action items, meet the acceptance criteria given in subsection II. SRP Section 14.3 (proposed) contains procedures for the review of certified design material (CDM) for the standard design, including the site parameters, interface criteria, and ITAAC.⁶⁵

IV. EVALUATION FINDINGS

The ~~reviewer verifies in the~~ safety evaluation report (SER) shall document that sufficient information has been provided in the ~~SAR~~ safety analysis report to allow a comprehensive evaluation of the consequences of small line failure.⁶⁶ The applicant's analysis and the staff's independent calculations are summarized.

The SER should identify the specific small line failure that was analyzed by the staff and the calculated doses, including the assumptions and unique system and operation provisions. The evaluation should support conclusions of the following type to be included in the SER:

The staff concludes that the distances to the exclusion area and to the low population zone outer boundaries for the (insert PLANT NAME) site, in conjunction with the operation of the dose mitigating ESF systems, are sufficient to provide reasonable assurance that the calculated radiological consequences of a postulated small line failure outside the containment, assuming the primary coolant equilibrium iodine concentrations permitted by the standard technical specifications, in combination with an accident generated iodine spike, ~~do not exceed a small fraction of~~ are substantially below⁶⁷ the exposure guidelines as set forth in 10 CFR ~~Part 100, §~~⁶⁸100.11. The results of the staff's calculations are listed in Table 15.

The staff's conclusion is based on (1) the staff review of the applicant's classification and identification of small lines in accordance with General Design Criterion 55, "Reactor Coolant Pressure Boundary Penetrating Containment," and Regulatory Guide 1.11, "Instrument Lines Penetrating Primary Reactor"⁶⁹ Containment"; (2) the staff review of the applicant's analysis of radiological consequences of the failure of a small line downstream of the isolation valve;⁷⁰ (3) the independent dose calculation by the staff using regulatory position C.1.b of Regulatory Guide 1.11 and conservative atmospheric dispersion factors as discussed in Chapter 2 of this report; and (4) the (insert NSSS VENDOR) standard technical specifications for the equilibrium iodine concentrations in the primary coolant system. The staff will review the (PLANT NAME) specific technical specifications to ~~assure~~⁷¹ ensure that the dose guidelines stated above are not exceeded.

For a standard design certification review, the following paragraph is included in the staff's safety evaluation report:

The staff has calculated hypothetical off site radiological consequences of the failure of a small-diameter line using limits on coolant radioactivity from the proposed technical

specifications and atmospheric diffusion parameters specified in the site parameter envelope. The hypothetical offsite consequences are within the guidelines of 10 CFR Part 100.⁷²

For design certification reviews, the findings will also summarize, to the extent that the review is not discussed in other safety evaluation report sections, the staff's evaluation of inspections, tests, analyses, and acceptance criteria (ITAAC), including design acceptance criteria (DAC), site interface requirements, and combined license action items that are relevant to this SRP section.⁷³

V. IMPLEMENTATION

The following provides guidance to applicants and licensees regarding the staff's plans for using this SRP section.

This SRP section will be used by the staff when performing safety evaluations of license applications submitted by applicants pursuant to 10 CFR 50 or 10 CFR 52.⁷⁴ Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the method described herein will be used by the staff in its evaluation of conformance with Commission regulations.

The provisions of this SRP section apply to reviews of applications docketed six months or more after the date of issuance of this SRP section.⁷⁵

Implementation schedules for conformance to parts of the method discussed herein are contained in the referenced regulatory guide.

VI. REFERENCES

1. 10 CFR Part 50, Appendix A, General Design Criterion 55, "Reactor Coolant Pressure Boundary Penetrating Containment."
2. ~~Regulatory Guide 1.11, "Instrument Lines Penetrating Primary Containment."~~⁷⁶
32. 10 CFR Part 100, §⁷⁷ 100.11, "Determination of Exclusion Area, Low Population Zone and Population Center Distance."
3. Regulatory Guide 1.11, "Instrument Lines Penetrating Primary Reactor Containment."⁷⁸

SRP Draft Section 15.6.2
Attachment A - Proposed Changes in Order of Occurrence

Item numbers in the following table correspond to superscript numbers in the redline/strikeout copy of the draft SRP section.

Item	Source	Description
1.	Current PRB name and abbreviation	Changed PRB to Emergency Preparedness and Severe Accident Branch (PERB).
2.	Editorial	Defined "SRP" as "Standard Review Plan."
3.	Editorial	Identified PRB responsibility.
4.	Editorial	Provided "GDC 55" as initialism for "General Design Criterion 55."
5.	SRP-UDP format item	Deleted in-text callout for Ref. 1.
6.	Editorial	Added phrase from GDC 55 that refers to instrument or other small lines.
7.	SRP-UDP format item	Deleted in-text callout for Ref. 2.
8.	Editorial	Deleted reference to instrument and other small lines being exempt from the requirements of GDC 55 on the basis that isolation capability of small-diameter lines is a more accurate representation of the issue. Added that RG 1.11 defines instrument or other small line isolation capability and other requirements.
9.	Current review branch name and abbreviation	Changed review branch to Containment Systems and Severe Accident Branch (SCSB).
10.	Editorial	Changed "assure" to "ensure."
11.	Editorial	Corrected format for citing the Code of Federal Regulations.
12.	SRP-UDP format item	Deleted in-text callout for Ref. 3.
13.	SRP-UDP format item	Added RG 1.11 as a source of radiation dose criterion.
14.	SRP-UDP format item	Added "Review Interfaces" to AREAS OF REVIEW and organized in numbered paragraph form.
15.	Editorial	Changed PRB to PERB.
16.	Editorial	Added the words "as follows" for clarity.
17.	Current review branch abbreviation	Changed review branch to SRXB.
18.	Editorial	Deleted redundant phrase: "upon request by the AEB."
19.	SRP-UDP format item	Identified SRP section that includes mass of coolant released.
20.	Current review branch name and abbreviation	Changed PRB to Containment Systems and Severe Accident Branch (SCSB).

SRP Draft Section 15.6.2
Attachment A - Proposed Changes in Order of Occurrence

Item	Source	Description
21.	Editorial	Deleted redundant phrase: "upon request by the AEB."
22.	SRP-UDP format item	Identified SRP section for secondary containment functional design.
23.	SRP-UDP format item	Added SCSB review of isolation capability of small lines as a review interface.
24.	SRP-UDP format item	Added SPLB review of function of the secondary containment atmospheric cleanup system as a review interface.
25.	SRP-UDP format item	Added review interface with TSB to conform to SRP Section 15.6.4.
26.	Editorial	Replaced General Design Criterion 55 with GDC 55, as defined above.
27.	SRP-UDP format item	Deleted in-text callout for to Ref. 1.
28.	Editorial	Deleted reference to instrument and other small lines being exempt from the requirements of GDC 55 on the basis that isolation capability of small-diameter lines is a more accurate representation of the issue.
29.	Editorial	Corrected format for citing the Code of Federal Regulations.
30.	SRP-UDP format item	Deleted in-text callout for Ref. 3.
31.	SRP-UDP format item	Included RG 1.11 as an acceptance criterion.
32.	Editorial	Modified for change from singular to plural context.
33.	Editorial	Replaced "small fraction" with "substantially below" since the latter is used in position C.1.b of RG 1.11.
34.	Editorial	Corrected format for citing the Code of Federal Regulations.
35.	SRP-UDP format item	Deleted in-text callout for Ref. 3.
36.	SRP-UDP format item	Deleted in-text callout for Ref. 2.
37.	Editorial	Replaced "small fraction" with "substantially below" since the latter is used in position C.1.b of RG 1.11.
38.	Editorial	Corrected format for citing the Code of Federal Regulations.
39.	SRP-UDP format item	Added metric units.
40.	SRP-UDP format item	Added "Technical Rationale" to "ACCEPTANCE CRITERIA" and organized in numbered paragraph form to describe the bases for referencing the GDC and regulations.

SRP Draft Section 15.6.2
Attachment A - Proposed Changes in Order of Occurrence

Item	Source	Description
41.	SRP-UDP format item	Added lead-in sentence for "Technical Rationale."
42.	SRP-UDP format item	Added technical rationale for GDC 55.
43.	SRP-UDP format item	Added technical rationale for 10 CFR 100.11.
44.	Editorial	Deleted reference to recent reviews because there may be none and because the reviewer's determination of safety significance is a more definitive criterion.
45.	Editorial	Identified the specific class of lines to which RG 1.11 applies.
46.	Editorial	Deleted reference to instrument and other small lines being exempt from the requirements of GDC 55.
47.	Current review branch abbreviation	Changed review branch to SCSB.
48.	Current PRB abbreviation	Changed PRB to PERB.
49.	Editorial	modified to eliminate gender-specific pronoun.
50.	Current review branch abbreviation	Changed review branch to SCSB.
51.	Editorial	Deleted reference to recent reviews because there may be none and because the technical expertise of SRXB is a more definitive verification.
52.	SRP-UDP format item	Added to conform to review interface identified in AREAS OF REVIEW.
53.	Editorial	Deleted because RG 1.11 applies only to instrument lines.
54.	Editorial	Deleted reference to recent reviews because there may be none and because the reviewer's technical judgement is a more definitive criterion.
55.	Current review branch abbreviation	Changed review branch to SRXB.
56.	Editorial	Defined NSSS.
57.	Editorial	Revised sentence structure for consistency with previous sentence.
58.	Current review branch abbreviation	Changed review branch to SRXB.
59.	Editorial	Deleted redundant word.
60.	Current review branch abbreviation	Changed review branch to SRXB.
61.	Editorial	Deleted unnecessary phrase.
62.	SRP-UDP format item	Added to conform to review interface identified in AREAS OF REVIEW.

SRP Draft Section 15.6.2
Attachment A - Proposed Changes in Order of Occurrence

Item	Source	Description
63.	Editorial	Corrected format for citing the Code of Federal Regulations.
64.	SRP-UDP format item	Added calculation of offsite consequences for a standard design certification using coolant radioactivity specified in the proposed technical specifications and atmospheric diffusion parameters specified in the site parameter envelope.
65.	SRP-UDP Guidance, Implementation of 10 CFR 52	Added standard paragraph to address application of Review Procedures in design certification reviews.
66.	Editorial	Changed emphasis from findings of reviewer to contents of SER.
67.	Editorial	Replaced small fraction with substantially below since substantially below is used in position C.1.b of RG 1.11.
68.	Editorial	Corrected format for citing the Code of Federal Regulations.
69.	Editorial	Corrected title of RG 1.11.
70.	Editorial	Added phrase to describe the source of the consequences.
71.	Editorial	Changed "assure" to "ensure."
72.	SRP-UDP format item	Added evaluation findings for a standard design certification review per 10 CFR Part 52.
73.	SRP-UDP Format Item, Implement 10 CFR 52 Related Changes	To address design certification reviews a new paragraph was added to the end of the Evaluation Findings. This paragraph addresses design certification specific items including ITAAC, DAC, site interface requirements, and combined license action items.
74.	SRP-UDP Guidance, Implementation of 10 CFR 52	Added standard sentence to address application of the SRP section to reviews of applications filed under 10 CFR Part 52, as well as Part 50.
75.	SRP-UDP Guidance	Added standard paragraph to indicate applicability of this section to reviews of future applications.
76.	Editorial	Moved Ref. 2 to Ref. 3.
77.	Editorial	Corrected format for citing the Code of Federal Regulations.
78.	Editorial	Moved Ref. 2 to Ref. 3.

SRP Draft Section 15.6.2
Attachment B - Cross Reference of Integrated Impacts

Integrated Impact No.	Issue	SRP Subsections Affected
	No Integrated Impacts were incorporated in this SRP Section.	